



Innovating India

In pursuit of global leadership

Executive Report

IBM Business Analytics and Strategy

How IBM can help

To succeed in today's environment, businesses need to lead through increased complexity and volatility, drive operational excellence and enable collaboration across enterprise functions, develop higher quality leadership and talent, manage amidst constant change and unlock new possibilities grounded in data. The IBM Business Analytics and Strategy practice integrates management consulting expertise with the science of analytics to enable leading organizations to succeed.

Innovation— The key to future growth

India's rapid economic growth over the past three decades has brought increasing prosperity to the nation. But, as the Indian economy continues to mature, the path forward to sustained success lies with those organizations that pursue innovation—embracing innovative processes, encouraging innovative behaviors and creating sustained innovation momentum. A new IBM survey in cooperation with the Economist Intelligence Unit of more than 1,000 global executives helps reveal how India can capture and sustain the “magic” in its innovation.

Executive summary

India's economy is among the world's most successful, having grown more than six-fold over the past three decades.¹ Fueled by innovation in, among others, the automotive, pharmaceuticals, banking and information technology (IT) sectors, India's economy today attracts substantial foreign direct investment (FDI). Total FDI inflows into India in the period from April 2000 to August 2014 totaled more than US\$ 341 billion.²

Innovation affords a way for India to sustain and expand its growth success. By promoting systems and environments that support innovation, India can continue to expand its productive potential. Organizations that embrace innovation will be at the vanguard of driving growth and productivity. To accomplish this, they must:

- *Institutionalize innovation*—Current sporadic mechanisms for innovation or “creative improvisation” need to evolve into structured innovation. Leading Indian companies, such as large IT organizations, have disrupted markets, but often have not built systemic innovation.
- *Permeate innovation across the economy*—Indian economy and society is heterogeneous and fragmented—innovation is often restricted to pockets of excellence. Sustained innovation needs to permeate across industries to increase its impact and drive higher growth in the Indian economy.
- *Extend and globalize innovation*—Successful innovations from India can be more aggressively globalized, including those in the automotive industry, e.g., electric cars, and healthcare, e.g., remote medicine.

India-based organizations looking to create more systematic and holistic innovation can learn valuable lessons from best practices of global innovation outperformers. Our analysis of responses to a global innovation survey of 1,004 executives (including 100 from India) across industries revealed three key areas that separate outperforming organizations from the rest (see Study methodology, page 19). Outperformers create:



Organizational structures and functions that support innovation—

The most successful organizations align innovation activities directly with business objectives, pursue “open” innovation structures and create specialized innovation teams.



Cultural environments to make innovation thrive—

The most successful organizations maintain a clear focus on innovation across all business activities, encouraging innovative behaviors and finding ways to sustain innovation momentum.



Processes to convert ideas into innovation—

The most successful organizations source new ideas from diverse locations, often leveraging big data and analytics; innovation is funded separately and measured rigorously.

Some Indian organizations are already leading the way. ITC, for example, is pioneering institutionalizing innovation through eChoupals, an IT-enabled network to support procurement from remote villages.² Permeating innovation can be seen in the efforts of Indian mobile phone maker Micromax, which has designed a touchscreen smartphone at a low price point for rural populations.³ Globalizing innovation is demonstrated by Hindustan Unilever, which has redefined the India consumer market through its innovation of sachets, or small packs of Unilever products, targeted to the thrifty consumer.⁴ These sachets, conceived in India, are now popular across Southeast Asia and beyond.

However, many organizations in India are not as developed in how they pursue innovation. Our IBM Institute for Business Value / Economist Intelligence Unit survey of Indian and global business leaders shows that:

- Indian executives tell us that their organizations typically are less likely to align their innovation goals with industry expansion goals; innovation processes tend to be less open across aspects of ideation; and organizations are less likely to have dedicated innovation teams.
- Indian leaders also tell us that they typically are less likely to provide clear direction and impetus for innovation; employee engagement and incentives around innovation are lower; and organizations tend to be less agile in their response to opportunities and changing circumstances.

On the positive side, our survey shows that Indian society is supportive of innovation and appetite for innovation in business is increasing; the primary sources for new ideas for Indian businesses are their customers; dedicated innovation funding has begun; and innovation is less likely to have financial metrics applied to it.

Overall, Indian companies tend to be equivalent to global peers in terms of their innovation efforts, but they lag behind the most successful global companies in the way they innovate.

For today's business leaders, innovation is more than magic—it is the art and science of anticipating the future. It is about understanding what the full potential of new technologies will be, of knowing what customers need and want, even before they know it themselves. And it is about building organizational and ecosystem-wide capabilities to develop, execute and deliver.

This executive report outlines the key innovation characteristics of the world's most successful companies—including those in India—and reveals clear steps that will help more Indian organizations become part of this elite, outperforming group.

in·no·va·tion \, i-nə -'vā-shən \ *Noun*
Origin: Latin, 1548
Derives from the Latin word
innovatus, past participle of innovare,
“to make changes; do something in a
new way,” from in- + novus - “new”

Merriam Webster Dictionary

Innovation is strongly correlated with value creation

Examination of how the most innovative companies compare to others in the market provides evidence of how closely innovation is tied to financial performance. The five-year revenue compound annual growth rate (CAGR) of the ten most innovative companies identified by the Boston Consulting Group is 36.5 percent more than that of the broader market (see Figure 1).⁵

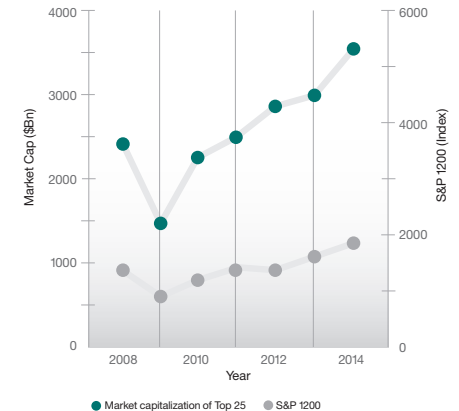
Figure 1

Innovative companies outpace the overall market in value creation.

BCG 25 Most Innovative Companies in 2013

- | | |
|--------------------------|-------------------------|
| 1. Apple Inc | 14. Volkswagen AG |
| 2. Samsung Electronics | 15. The Coca-Cola Co |
| 3. Google Inc | 16. Hewlett-Packard Co |
| 4. Microsoft Corp | 17. Hyundai Motor Co |
| 5. Toyota Motor Corp | 18. Honda Motor Co Ltd |
| 6. IBM | 19. Audi AG |
| 7. Amazon.com Inc | 20. Daimler AG |
| 8. Ford Motor Co | 21. Wal-Mart Stores Inc |
| 9. BMW | 22. Lenovo Group Ltd. |
| 10. General Electric Co | 23. Procter & Gamble Co |
| 11. Sony Corp | 24. Bayer AG |
| 12. Facebook Inc * | 25. LG Electronics Inc |
| 13. General Motors Co ** | |

Market capitalization growth BCG 25 Most Innovative Companies vs. S&P Global 1200



Source: The Most Innovative Companies 2013 survey by BCG; Standard & Poor's Global 1200 - revenues 2008 to April 2014

The nature of innovation is changing

Increasingly, innovation is occurring within what we call the everyone-to-everyone (E2E) economy. E2E encompasses a fundamental shift in mindset from “me” to “we.”⁶ In years past, organizations pushed out products and services to customers and then told customers why they were valuable. Today, continuing digital evolution and revolution, combined with a transition from traditional market-based economic structures to an ecosystem-based environment, has altered innovation in three distinct ways:

1. *Consumers have become directly involved in innovation.* Technology and hyper-connectedness have been catalysts for the collaboration of consumers and organizations across the gamut of value-chain activities: co-design, co-creation, co-production, co-marketing, co-distribution and co-funding. Consumers and organizations increasingly work together to create value in an environment of transparency and trust (see Figure 2). For example, Xiaomi, a leading Chinese smartphone producer, has a business model with no marketing budget or sales team. To build customer loyalty, the company releases a new version of its software every week in response to user feedback.⁷

2. *Technology is at the core of innovation.* New technology enables organizations to respond faster to customer needs and build compelling new capabilities and business models (see Figure 3). For example, users of Foldit, an online game that provides for crowd-sourced protein folding, deciphered the retroviral protease of the Mason-Pfizer Monkey Virus in ten days, a problem that had challenged scientists for more than 12 years.⁸

Figure 2

Innovation is occurring outside traditional paradigms – consumers are participating directly in innovation processes

71% of executives surveyed agree

that customers are a critical part of the innovation process



67% of executives surveyed agree*

that customers help develop products that have greater value

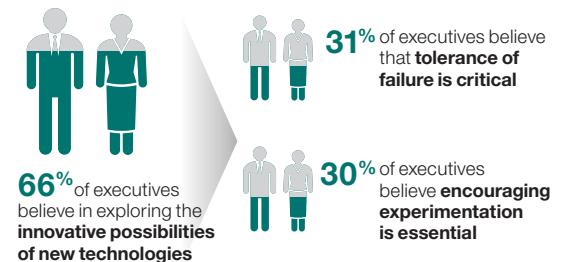


*Sum subject to rounding error
Source: IBM Institute for Business Value

Figure 3

Technology is typically at the center of innovation

Toleration of failure and encouragement of experimentation remains limited ... for now



Source: IBM Institute for Business Value

3. *Ecosystems are defining new types of innovation.* An ecosystem is a complex web of interdependent enterprises and relationships aimed at creating and allocating business value (see Figure 4). An example of this development is the partnership between Quirky and General Electric (GE). GE is crowdsourcing innovation through Quirky, reducing risk and sharing revenues with inventors who make breakthroughs.⁹

Figure 4

Ecosystems are emerging and driving more open approaches to innovation



Source: IBM Institute for Business Value

The most successful organizations do innovation differently

Only 6 percent of organizations surveyed in our IBM Institute for Business Value/Economist Intelligence Unit Global Innovation survey outperform others in both revenue growth and operating efficiency (profitability). We asked executives to rank themselves against their competitors along the two metrics. Using the survey respondent's ranking, we identified three specific categories of performance: outperformers, underperformers and peer performers (see Figure 5).

Armed with this categorical classification, we can answer two important questions. What do the most successful organizations do differently when it comes to innovation? And how do they consistently outperform their peers?

We found that the most successful organizations:

Build an organization that encourages innovation

Create a culture that fosters innovation

Design processes that enable innovation.

Figure 5

Our 2014 global innovation survey shows 6 percent of organizations outperform in revenue and profitability growth

Three performance categories emerged

Outperformers

Organizations that achieved **high revenue growth and high profitability**

6%

Underperformers

Organizations that achieved **low revenue growth and low profitability**

29%

Peer performers

Organizations with **any other performance combinations**

65%

Source: IBM Institute for Business Value

Some Indian companies are leading in this field: Vaatsalya innovated an inclusive business model to align its social and business goals

Vaatsalya is India's first hospital network focused on addressing medical needs in semi-urban and rural India, which are home to 70 percent of the population. Vaatsalya created a no-frills, low-price model of health care by investing frugally in infrastructure and equipment. Vaatsalya kept costs down by hiring local talent and setting up training centers for nurses and paramedic staff. The result has been rapid growth in just two years, with more than 500,000 patients being treated annually.¹⁰

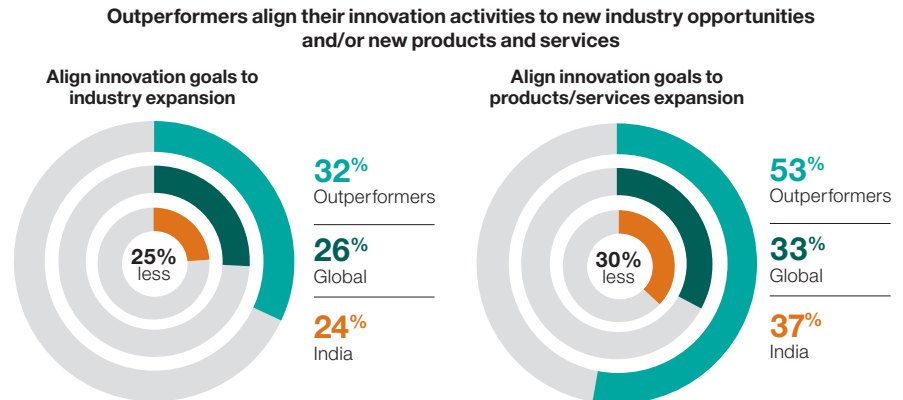
Build an organization that encourages innovation

The most successful companies create innovation structures and functions that align with and support their underlying business mission. They:

1. *Align innovation with business goals* — They promote innovation objectives related to their business objectives (see Figure 6). For example outperformers align innovation goals to the expansion of products and services 84 percent more than underperformers. They align innovation goals to industry expansion 61 percent more, and are 30 percent more likely to have senior management buy-in around innovation processes and initiatives. The survey found that, compared to outperformers, 70 percent more Indian companies experience buy-in issues for innovation among senior management.

Figure 6

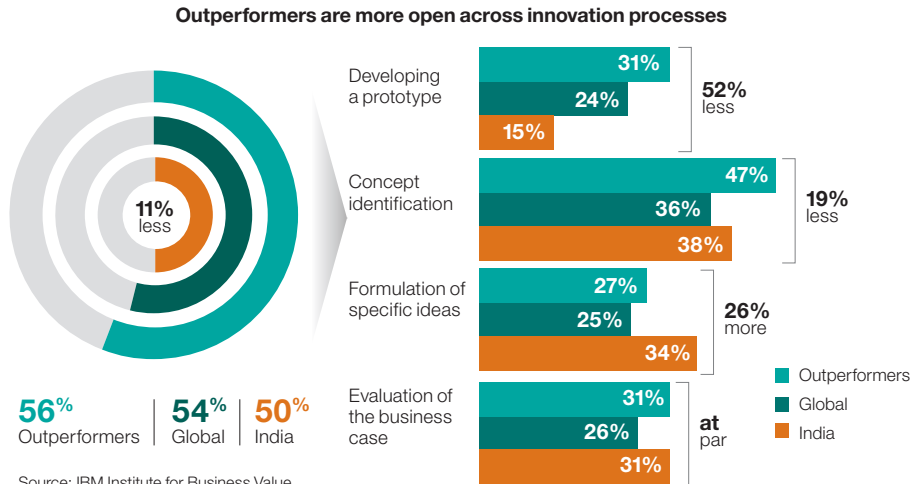
Outperforming organizations explicitly align their innovation strategy and objectives to clear business goals



Source: IBM Institute for Business Value

2. *Structure open forms of innovation*—Outperformers build robust structures to support open forms of innovation (using internal and external ideas and/or embracing open innovation concepts such as crowd sourcing). Twenty-four percent more outperforming organizations consider open environments more conducive to effective innovation than underperformers. And 10 percent more say that open environments lead to better and faster idea development. Thirty-seven percent more outperformers use open innovation processes than underperformers, and they are much more likely to adopt open strategies and approaches to ideation processes. Indian executives surveyed were 12 percent less likely to consider openness leads to better, faster idea development (see Figure 7).

Figure 7
Outperforming organizations embrace more open forms of innovation



Source: IBM Institute for Business Value

An Indian leader in open innovation: Tata encourages innovation across group companies through an open forum

TATA Group Innovation Forum is a network connecting Tata companies with the objective of facilitating innovation. Tata encourages employee engagement in innovation, and 25,000 employees have participated to come up with thousands of successful innovations to date. Tata companies spend about 2.5 percent of total revenue on R&D. In 2014, the combined economic benefit of the 43 finalist innovations was estimated to be approximately US\$1 billion per year.¹¹

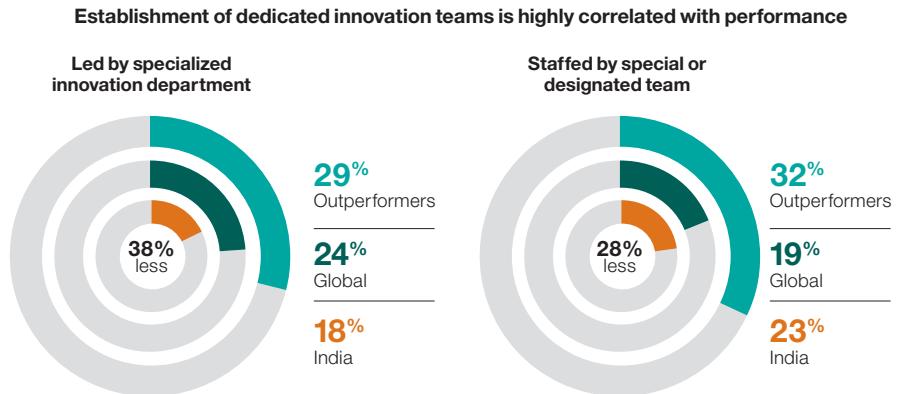
Aditya Birla Group: The conglomerate of diverse businesses has set up a unified R&D center

Aditya Birla Group has unified the R&D initiatives of all its businesses into the Aditya Birla Science and Technology Company. The company focuses on innovative advances in products, processes and applications, leveraging cross linkages between different businesses to drive innovation. The corporation has generated valuable intellectual property and filed numerous patent applications.¹²

3. *Create specialized teams*—Outperforming organizations are much more likely to create dedicated innovation teams (see Figure 8). Specifically, outperformers are 79 percent more likely to establish and maintain a special or designated innovation team compared to underperformers, and those teams are 24 percent more likely to be part of a specialized innovation department. Of the Indian executives surveyed, 24 percent fewer consider products, services and operations in their innovation decisions and 28 percent fewer consider business units.

Figure 8

Outperforming organizations are more likely to dedicate specialized teams to innovation



Source: IBM Institute for Business Value

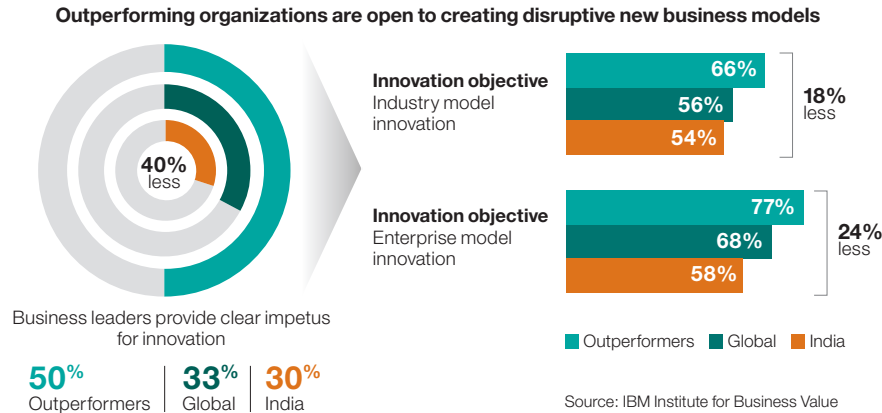
Create a culture that fosters innovation

Creating cultures and environments in which innovation can thrive is crucial for successful innovation and is another differentiating characteristic of the most successful companies:

1. *Lead with an innovation focus*—Business leaders in outperforming organizations explicitly promote innovation as central to business activity. Leaders of outperforming organizations are 92 percent more inclined to provide a clear direction and impetus for innovation (see Figure 9). They are also more open to industry and enterprise model innovation and are 27 percent more likely to link innovation efforts with financial performance, requiring innovation to be associated with increased business value. Among Indian executives interviewed, 18 percent fewer consider clear focus on performance as key to successful innovation.

Figure 9

Outperforming organizations have leaders that explicitly promote innovation as a central business objective



An example of leading with an innovation focus: Tata Docomo created a “Paradigm Shift” for phone users with its unique bill plan

Tata Docomo aims to constantly innovate its product offerings. In 2009, it launched a “pay-per-second” billing plan, which was a first of its kind and led to a disruption of the telecom market in India. The initiative attracted 10 million new subscribers in five months. At the same time, mobile penetration increased from 29 percent to 43 percent in one year.¹³

Maruti Suzuki engineers have freedom to drive innovation

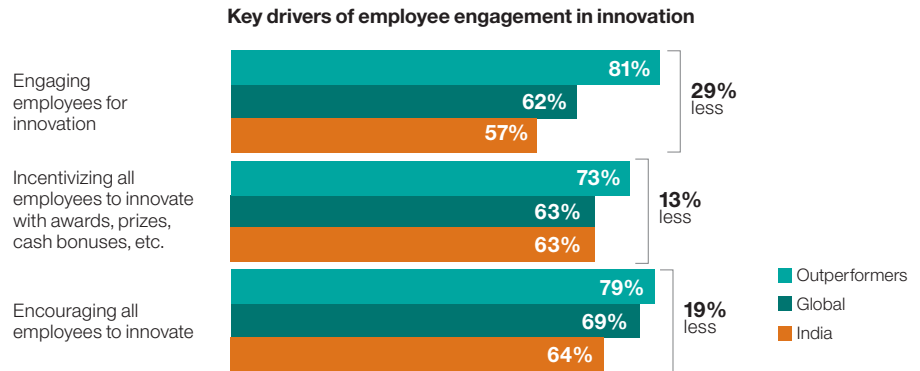
India's Maruti Suzuki embraces an open door policy to boost the spirit of innovation. Engineers are free to innovate and to apply "anything they have learned from their colleges" that might be new and valuable. The automaker owns more than one hundred patents, the majority of which were developed by its engineers. This innovative approach has contributed to a doubling of the company's net sales and profit after tax in past five years.¹⁴

2. *Encourage innovative behaviors*—Outperforming organizations, compared to underperformers, are 17 percent more likely to actively encourage innovation by employees through specific incentives and rewards. And they are 31 percent more likely to engage employees directly in innovation (see Figure 10). Importantly, outperforming organizations also have a greater tolerance of failure. They are 25 percent more likely to accept that some innovation projects will not succeed. Eight percent fewer Indian executives surveyed believe that their organizations will tolerate failure in innovation.

3. *Sustain innovation momentum*—Outperforming organizations are 37 percent more likely than underperformers to promote agility in their culture and way of doing business. They are also 29 percent more likely to stay ahead of changing customer attitudes and expectations (see Figure 11). Outperformers are 26 percent more likely to consciously and explicitly build an environment of trust among stakeholders in pursuing innovation.

Figure 10

Outperforming organizations actively encourage their employees to innovate



Source: IBM Institute for Business Value

Indian executives surveyed are on par with outperforming organizations in their belief that they promote a culture of trust to support continuous innovation. However, they rank less highly in key metrics around innovation agility, staying ahead of customer expectations and mitigating innovation risks through early customer engagement.

Design processes that enable innovation

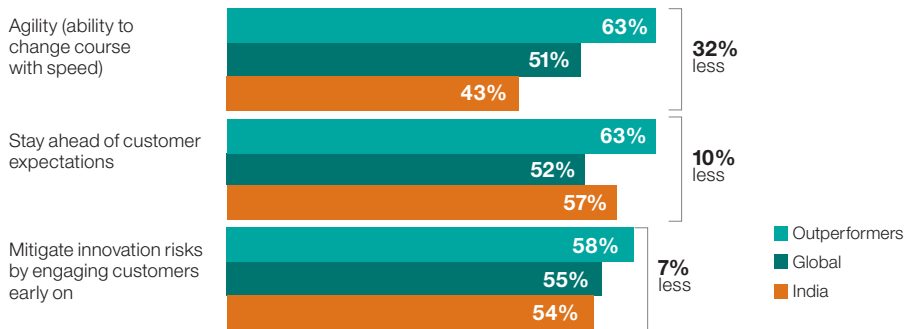
The most successful organizations directly source and fund new ideas. They are also more likely to measure the effectiveness of their innovation program to demonstrate the value created:

1. *Source new ideas from a wide range of sources* – Outperforming organizations are more likely to welcome inputs into ideation processes. They are 23 percent more likely to use big data and 79 percent more likely to use analytics to identify new innovative opportunities. They are 35 percent more likely to use customer surveys and 156 percent more likely to use competitions.

Figure 11

Outperforming organizations are more agile in sustaining innovation momentum

Outperforming organizations are better at staying ahead of the market



Source: IBM Institute for Business Value

ICICI Bank constantly innovates to improve customer experience

ICICI Bank leads innovation in product offerings by embracing new technology faster than its competition. It leveraged social media to launch bank account offerings through Facebook and created a real-time dashboard to integrate customer complaints from Twitter and Facebook directly into its customer relationship management processes. ICICI pioneered “Cardless Cash Withdrawal” service in 2014. And it continued to achieve double-digit growth despite global financial instability.¹⁵

Flipkart innovates to meet customer expectations by harnessing customer data

Flipkart, an e-commerce company started in 2007, has been a pioneer in introducing innovations such as Cash on Delivery and Credit Card at Doorstep. The company bases its innovations on customer insights from its data. Flipkart uses real-time web analytics to test ideas in real time and calibrate and support new innovations. As a result, Flipkart has become a significant e-commerce player in India, with sales of US\$1 billion in 2014.¹⁶

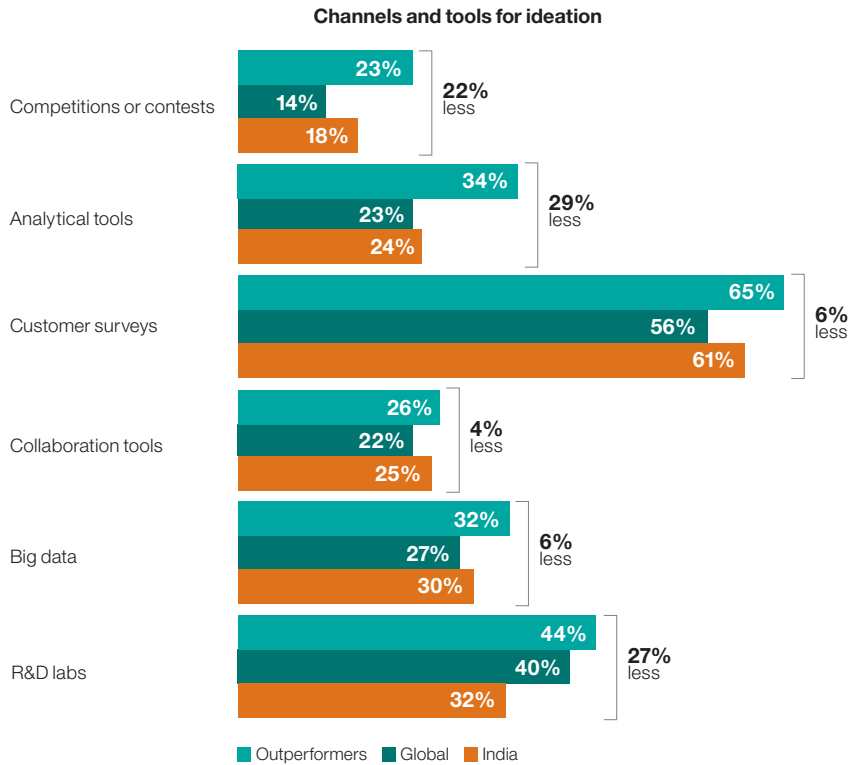
And they engage employees (31 percent) and channel partners (37 percent) in idea generation much more frequently. However among Indian executives surveyed, 38 percent fewer source ideas from channel partners, 26 percent fewer from business units and 29 percent fewer from employees (see Figure 12).

2. Fund innovation – Outperforming organizations are more likely to approach innovation with the same disciplined approach as they would any other business process. They are 45 percent more likely to allocate dedicated funding to innovation and use business-case methodologies to make go/no go decisions on specific innovations. And they are more likely to fund innovation activities at sufficient levels to build and maintain an effective innovation program. Among Indian executives surveyed, 24 percent identify challenges with innovation funding due to the absence of a business case (see Figure 13).

3. Measure innovation outcomes – Outperforming organizations hold innovation initiatives accountable to clear financial objectives. They are 35 percent more likely to explicitly measure the outcome of innovation initiatives. Specifically, they are 48 percent more likely to measure financial

Figure 12

Outperforming organizations source new ideas from a variety of sources

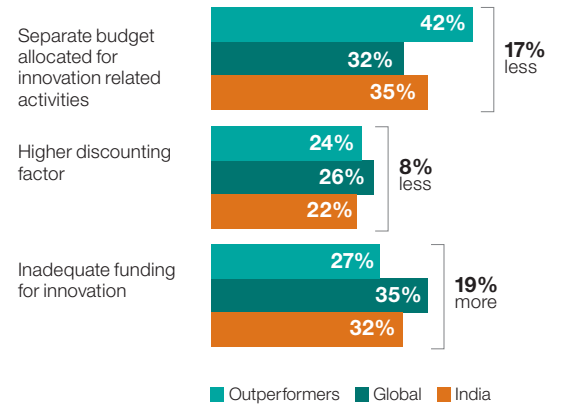


Source: IBM Institute for Business Value

Figure 13

Outperforming organizations fund innovation separately from other projects

Outperformers are also more likely to allocate funds necessary for an effective innovation program

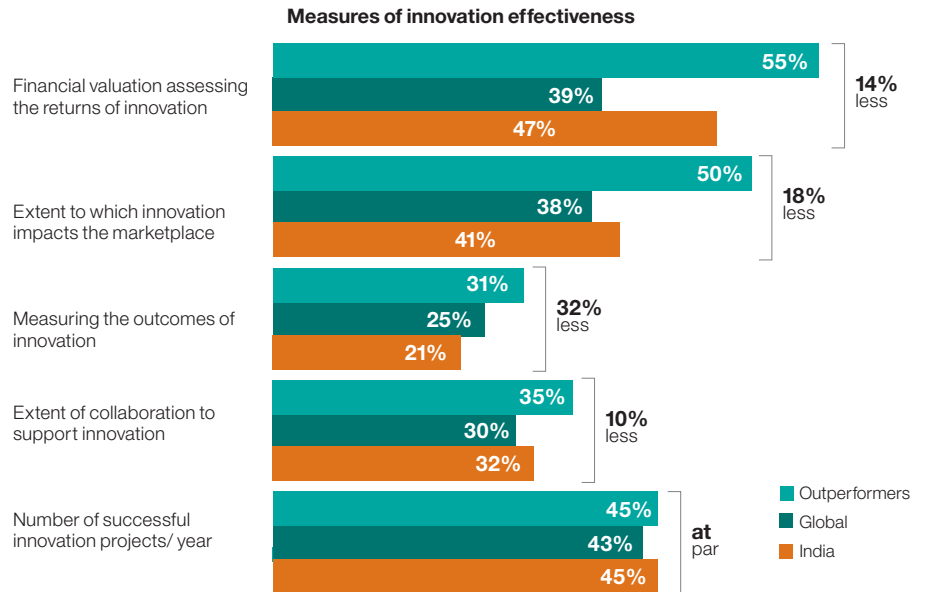


Source: IBM Institute for Business Value

return on investments from innovation, and 47 percent more likely to assess its impact on their market (see Figure 14). By being methodical and promoting accountability and transparency in ROI of innovation spending, outperformers are better able to justify its continuing funding. As such, outperforming organizations are more likely to secure stable investment and minimize the vagaries of quarterly or annual budgeting volatility. Indian executives surveyed tend to be less quantitative across the board in the ways in which they measure innovation.

Figure 14

Outperforming organizations measure financial return on investments from innovation



Source: IBM Institute for Business Value

Innovation lessons from the world's most successful companies

Key learnings emerge that can help those Indian organizations looking to become more innovative.

Innovation organization

Key learning 1: Drive impact from both economic and human resources. Channel innovation effort towards industry expansion, product/services expansion. Focus on innovative ideas most closely aligned with overall business goals.

Key learning 2: Continue to open up innovation processes. Provide employees the tools and physical/virtual environments to engage in open collaboration and allow them to connect and interact with a range of external parties. Establish governance to ensure regulatory compliance and protect valuable intellectual property.

Key learning 3: Establish dedicated innovation teams. A dedicated innovation group can fulfill two important roles: provide management and governance for the overall innovation program; and support specific innovation activities. Build a team to support facilitation of new ideas, collaboration and assistance in business case development.

Innovation culture

Key learning 1: Provide clear impetus to the innovation agenda. Innovation can underpin all aspects of day-to-day business, from interactions with customers, to operations. But innovation needs to be more than semantic – hold innovation accountable to produce real value creation. Nurture more disruptive forms of business model innovation centrally to mitigate organizational resistance.

Key learning 2: Build a climate of innovation. Actively engage employees in the innovation process. With a strong innovation culture, employees naturally collaborate and support new thoughts and initiatives. Give people the time and space they need to innovate. Provide incentives or rewards for innovative behavior, including visible recognition.

Key learning 3: Prioritize agility as a critical capability. Speed and flexibility will be the defining features of successful innovation. Innovation is becoming insatiable – requiring continuous injections of new ideas and initiatives. Staying ahead of changes in customer aspirations will be a crucial part of any successful innovation strategy.

Innovation process

Key learning 1: Create R&D labs for ideation. Organize competitions and contests to source new ideas. Ideas are a critical input to innovation. An open, flexible idea generation platform, coupled with robust idea evaluation processes, can potentially drive substantial benefits. Deploying analytics and data in pursuit of new ideas adds an additional, powerful dimension.

Key learning 2: Secure an innovation funding stream. Innovation works best with stable, distinct funding. Creating a formulaic funding source for innovation can protect it from the perils of quarterly budgeting decisions. Crowd-funding or allocating a specific percentage of cost savings to innovation can help provide a more stable funding arrangement.

Key learning 3: Use quantitative metrics to evaluate innovation. Financial metrics provide clear, consistent discipline to innovation funding decisions, but they are only part of the story. Other measures, such as likely market impact, can give added context to funding and gating decision making to keep important projects alive.

From here, where?

Innovative organizations outperform their peers. The most successful innovators are able to create new types of business value in sustainable ways. There are valuable innovation lessons from the world's leading companies, including those in India. The key learnings outlined in this report will help provide those companies in India that would like to become more innovative a pathway to achieve their objectives.

Key questions to help promote more innovation

- Can your organization improve the way it innovates and grows?
- Do your executives and employees embrace innovation in everything they do?
- Do you have structures in place to identify, select and develop the most impactful new ideas from your customers, employees and partners?

Study methodology

In developing this executive report, the IBM Institute for Business Value collaborated with the Economist Intelligence Unit to survey 1,004 C-suite level executives or their direct reports from 17 industries around the globe, including 100 from India. We analyzed survey data using regression analysis to identify correlations between business performance and innovation. We then developed an econometric model and performed common factor and regression analyses on selected innovation survey respondent data. We identified key innovation themes associated with financial out performance.

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Produced in the United States of America, July 2015

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